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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/515,978	02/25/2000	Gerald M. Benson	55250US002	9164
32692 7590 08/13/2008 3M INNOVATIVE PROPERTIES COMPANY PO BOX 33427 ST. PAUL, MN 55133-3427				
			EXAMINER CHEVALIER, ALICIA ANN	
			ART UNIT 1794	PAPER NUMBER
			NOTIFICATION DATE 08/13/2008	DELIVERY MODE ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

LegalUSDocketing@mmm.com  
LegalDocketing@mmm.com

### Office Action Summary

**Application No.**

09/515,978

**Applicant(s)**

BENSON ET AL.

**Examiner**

ALICIA CHEVALIER

**Art Unit**

1794

**Period for Reply** -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 05 May 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 9-14, 16-37 and 40 is/are pending in the application.
- 4a) Of the above claim(s) 9-14 and 24-37 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 16-23 and 40 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/C)
- 4) ☒ Interview Summary (PTO-413)
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_
- Paper No(s)/Mail Date 2/7/08

## RESPONSE TO AMENDMENT

### *Request for Continued Examination*

1. The Request for Continued Examination (RCE) under 37 CFR 1.53 (d) filed on February 7, 2008 is acceptable and a RCE has been established. An action on the RCE follows.
2. Claims 9-14, 16-37 and 40 are pending in the application, claims 9-14 and 24-37 are withdrawn from consideration. Claims 1-8, 15, 38 and 39 have been cancelled.
3. Amendments to the specification and the claims, filed on May 5, 2008, have been entered in the above-identified application.

### *REJECTIONS*

4. **The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.**

### *Claim Rejections - 35 USC § 102*

5. Claims 16-23 and 40 are rejected under 35 U.S.C. 102(b) as being anticipated by Nilson et al. (U.S. Patent No. 5,657,162).

Nilson discloses a compound substrate comprising a first substrate having a structured surface (*microprisms, col. 2, lines 43-44, figure 2, ref. #26*), a second substrate (*metallic deposits, col. 2, lines 48-49*) piece and/or discrete pieces embedded in a portion of the structured surface of the first substrate (*figure 2*) and at least one cube corner element that has at least one constituent face disposed on the first substrate and a least another constituent face disposed on

the second substrate piece (*figure 2*). Each of the first and second substrate have an exposed surface that defines a face of a cube corner element on the compound substrate (*figure 2*).

The limitation “wherein embedding the second substrate piece in the structure surface of the first substrate involves ...” is a method limitation and does not determine the patentability of the product, unless the process produces unexpected results. The method of forming the product is not germane to the issue of patentability of the product itself, unless Applicant presents evidence from which the Examiner could reasonably conclude that the claimed product differs in kind from those of the prior art. MPEP 2113. The resulting structure from this method is that embedding the second substrate piece only requires that the second substrate piece to be bonded to the first substrate at certain points. Nilson clearly shows in *figure 2*, that the second substrate (*metallic deposits*) are only bonded in certain points.

The cube corner element has a cube height of no greater than about 1 mm (*col. 2, lines 64-67*) and the at least one constituent face and the at least another constituent face are disposed on opposite sides of a transition line that is nonparallel to a dihedral edge of the cube corner element (*figure 2*). The at least one constituent face and the at least another constituent face are disposed on opposite sides of transition line, wherein substantially all transition lines are parallel to a reference plane (*figure 2*). The cube corner element is deemed to have an outline in plan view selected from the group of shapes consisting of a hexagon and a quadrilateral. The structured surface of the first substrate includes cavities and discrete pieces of the second substrate comprising a plurality of pyramids that are adjacent to the cavities and form cube corner elements (*figure 2*).

***ANSWERS TO APPLICANT'S ARGUMENTS***

6. Applicant's arguments in the response filed May 5, 2008 regarding the rejection of record have been considered but are moot due to the new grounds of rejection.

***Conclusion***

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alicia Chevalier whose telephone number is (571) 272-1490. The examiner can normally be reached on Monday through Friday from 8:00 am to 4:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rena Dye, can be reached on (571) 272-3186. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Alicia Chevalier/  
Primary Examiner, Art Unit 1794  
8/12/2008